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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,086	12/28/2001	Mehmet Yavuz	13667RRUS01U	2205

42640 7590 11/16/2005

DILLON & YUDELL LLP  
8911 NORTH CAPITAL OF TEXAS HWY  
SUITE 2110  
AUSTIN, TX 78759

EXAMINER
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PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/034,086	Applicant(s) YAVUZ ET AL.	
	Examiner Bob A. Phunkulh	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 7-10 and 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/29/02, 12/28/01</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 11-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Sindhushayana et al. (US 6,751,199), hereinafter Sindhushayana.

Regarding claims 1 and 11, *Sindhushayana* discloses a method applicable within a mobile communication system for adaptively allocating a downlink data rate to an access terminal to compensate for channel fading, the method comprising:

selecting a downlink data rate in accordance with a determined signal-to-noise level, wherein the downlink data rate is associated with a specified signal-to-noise threshold to achieve a specified packet error rate (the data rate is selected to maintain targeted packet error rate (PER), see abstract);

transmitting a packet to an access terminal at the selected downlink data rate;  
and

responsive to successfully decoding the packet, decreasing the signal-to-noise threshold specified for the selected downlink data rate (the AT maintains a look up table, which comprises a set of SINR thresholds that represent a minimum SINR

Art Unit: 2661

necessary to successfully decode a packet at each data rate. The AT uses the adjusted set of SINR thresholds in the look up table to select the highest data rate, the SINR threshold of which is below the predicted SINR, see abstract).

Regarding claims 2, 12, *Sinduhushayana* discloses determined signal-to-noise level at the access terminal is a ratio of the signal strength of an allocated access terminal channel to the combined external signal strength (the SIR is determined at terminal 202, see figure 2 and col. 4 lines 59 to col. 5 line 5).

Regarding claims 3, 13, *Sinduhushayana* discloses the selecting a downlink data rate is preceded by determining a signal-to-noise level at the access terminal (the SIR is determined at terminal 202, see figure 2 and col. 4 lines 59 to col. 5 line 5).

Regarding claims 4, 14, *Sinduhushayana* the selecting a downlink data rate further comprises: comparing the determined signal-to-noise level with a plurality of signal-to-noise threshold values, wherein each of the plurality of signal-to-noise threshold values is associated with a downlink data rate; and selecting a highest downlink data rate corresponding to one of the plurality of signal-to-noise threshold values that does not exceed the determined signal-to-noise level (the AT maintains a look up table, which comprises a set of SINR thresholds that represent a minimum SINR necessary to successfully decode a packet at each data rate, see abstract).

Art Unit: 2661

Regarding claims 5 and 15, *Sinduhushayana* the mobile communication system includes selectable data rate control sets in which each of the plurality of signal-to-noise threshold values is associated with a corresponding downlink data rate for the specified packet error rate, and wherein two or more of the plurality of signal-to-noise threshold values that do not exceed the determined signal-to-noise level are associated with the highest downlink data rate, the method further comprising: comparing the relative values of the two or more signal-to-noise threshold values; and selecting a data rate control set corresponding to the lowest among the two or more signal-to-noise threshold values (the AT maintains a look up table, which comprises a set of SINR thresholds that represent a minimum SINR necessary to successfully decode a packet at each data rate. The AT uses the adjusted set of SINR thresholds in the look up table to select the highest data rate, the SINR threshold of which is below the predicted SINR. The AT then requests, over the reverse link, that the AP send the next packet at this data-rate, see abstract).

Regarding claims 6 and 16, *Sinduhushayana* discloses responsive to unsuccessfully decoding the packet, increasing the signal-to-noise threshold specified for the selected downlink data rate (the AT uses the adjusted set of SINR thresholds in the look up table to select the highest data rate, the SINR threshold of which is below the predicted SINR, see abstract).

***Allowable Subject Matter***

Claims 7-10, 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**Any response to this action should be mailed to:**

The following address mail to be delivered by the United States Postal Service (USPS) only:

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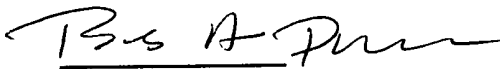
Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M.

Art Unit: 2661

to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Chau Nguyen**, can be reach on **(571) 272-3126**. The fax phone number for this group is **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bob A. Phunkulh  
Primary Examiner  
TC 2600  
Art Unit 2661  
November 13, 2005

**BOB PHUNKULH**  
**PRIMARY EXAMINER**